Municipal Market Advisors

CORPORATE RATINGS FOR MUNIS

The Trusted Name in Municipal Market Strategy

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Rating Categories	Cumulative Historic Default Rates			
	Moody's		S&P	
	Munis	Corps	Munis	Corps
Aaa/AAA	0.00%	0.52%	0.00%	0.60%
Aa/AA	0.06%	0.52%	0.00%	1.50%
A/A	0.03%	1.29%	0.23%	2.91%
Baa/BBB	0.13%	4.64%	0.32%	10.29%
Ba/BB	2.65%	19.12%	1.74%	29.93%
B/B	11.86%	43.34%	8.48%	53.72%
Caa-C/CCC-C	16.58%	69.18%	44.81%	69.19%
Investment Grade	0.07%	2.09%	0.20%	4.14%
Non-Invest Grade	4.29%	31.37%	7.37%	42.35%
All	0.10%	9.70%	0.29%	12.98%

Figure 1. Historically, all investment grade munis have defaulted less frequently than AAA corporations.

Sector	Muni Defaults By Sector	
	Sector	Cumulative
Corporate-Backed IDBs	31.9%	31.9%
Housing	25.1%	57.0%
Long Term Care	19.1%	76.1%
Land Secured	10.2%	86.3%
Hospitals	5.5%	91.8%
Utilities	3.5%	95.3%
GO & Lease	1.8%	97.1%
Public Facilities	1.2%	98.2%
Transportation	1.0%	99.2%
Education	0.8%	100.0%

Figure 2. Fitch study of defaults between '79 and '02; the implication is that even the default statistics shown in Fig. 1 dramatically understate the real risk in safe sector bonds like GOs.

Mapping Muni to Global Scale Ratings					
	Corporate Scale Equivalents, by Sector				
Muni Scale Ratings	State GO	Local GO, State Lease, Wtr/Swr	COPs; Sp Tax; Pub. Higher Ed; Airports	Private Higher Ed, Hospitals	Start-up TIFs and toll roads, CCRC, Multifam
Aaa	Aaa	Aaa	Aaa	Aaa	Aaa
Aa	Aaa	Aaa	Aa-Aaa	Aa-Aaa	Aa
A	Aa-Aaa	Aa	Aa	A-Aa	A-Aa
Baa	Aa	A-Aa	A	A	Baa-A
Ba	A-Aa	A	Baa-A	Baa	Ba-Baa
B	Baa-A	Baa	Ba-Baa	B-Ba	B-Ba
Caa	Baa	Ba-Baa	B-Ba	Caa-B	Caa-B

Figure 3. From Moody's 3/07 report showing how muni scale ratings (at left) map to the global scale. For example, all local GOs with an investment grade rating on the muni scale would be a Aa or better on the corporate scale.

OVERVIEW AND PROS/CONS

OVERVIEW: Most municipal bonds are rated on a different, more conservative rating scale than corporate bonds. Triple-A US corporate bonds have up to 10x the historical default rate of single-A munis (**Fig. 1**). Neither municipal issuers, nor the individual investors who own the large majority of outstanding paper or fund shares, understand this point. As a result of the "muni rating scale," taxpayers likely pay a large premium to access the capital markets (via insurance and rating fees and higher interest rates). We recommend that state and local issuers, or their federal regulators, consider requiring rating scale equivalency either directly or by policy alternative.

THE PROBLEM: The muni scale increases issuers' costs by:

1. Creating the appearance of increased default risk and credit opacity, warding off potential investors;
2. Exaggerating rating (and thus bond price and investor) volatility, encouraging buyers to seek higher returns to compensate for the risk;
3. Requiring a costly interim step—bond insurance—in order for municipal credit to be translated to the corporate rating scale; and
4. Creating an opportunity cost for issuers forced to manage financial and capital operations to overly-conservative rating standards.

BENEFITS AND SUPPORTERS: A transition to corporate scale ratings on munis would broaden investor demand for tax-exempt bonds, and likely reduce both benchmark and credit-related yields. This could well affect the income of many traditional investors, yet there is still growing support for corporate scale ratings on munis, specifically:

1. Tender option bond programs (encompassing hedge funds, dealer proprietary desks, and third party sponsors), which are almost universally facing liquidity risks and mark-to-market costs on fears of a bond insurer downgrade below AA;
2. Dealers and investors, who are transacting in a de-commoditized

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OPPOSITION AND RATING THEORY

muni market with higher costs of both buying and selling a loan; corporate AAAs could re-establish some uniformity and broaden investor participation in both cash bonds and related derivative products;
3. Smaller secondary trading interests, for whom today's more granular secondary market may be causing price discovery and transparency difficulties;
4. Corporate risk managers, who are seeking to better compare asset class exposures on an apples-to-apples basis;
5. The muni ETF market, because a reduction in rating-specific dynamics supports index-oriented return performance;
6. The muni credit default swap (CDS) market, where better apples-to-apples comparisons with corporate risks, along with more direct exposure to the muni issuers themselves, could stoke both buyer and seller demand and facilitate growth; and
7. State and local taxpayers, who are facing difficult budget conditions, would benefit from any related cost reductions.

RISKS AND OPPONENTS: By contrast, opposition to corporate scale ratings comes from:
1. Traditional investors, who by their expertise have long benefitted from confusion created by the current rating dichotomy (although any diminution in bond insurance could help muffle related losses);
2. The bond insurers, for whom corporate scale ratings would represent a permanent, structural contraction in their profits (municipal issuers and taxpayers have given the insurers as much as $2.3B per year in premiums according to S&P);
3. The rating agencies themselves, in particular S&P, which continues to publicly insist that municipal ratings are already on a global scale. By contrast, Moody's work in this area implies that they would be more amenable to change;
4. Current AAA (either corporate- or muni scale) issuers, who would see demand dilution for their offerings; and possibly
5. Muni investment bankers and financial advisors, who, in the interest of easier and thus cheaper distribution of immediate primary market offerings, will likely be biased against dramatic market innovation.

Other risks entail unfavorable press coverage, as the current editorial bias favors more conservative underwriting; a shift to corporate scale ratings could easily, but incorrectly, be portrayed as a loosening of credit standards. Further, the muni market may have some difficulty adjusting to a major rating standard change: many traditional investors could choose to "look through" the corporate scale rating. The benefits of a change may not outweigh the costs until the medium-term (3-5 years).

COMPARING RATING SCALES: To illustrate rating scale differences, we note the relative default studies prepared by all three rating agencies—starting with the Fitch paper in 1999—that point to dramatically lower default rates for municipal bonds versus comparably rated corporate obligations (**Fig. 1, page 1**). The ten year cumulative default rate for *all* Moody's-rated muni bonds (0.10%) is less than one-fifth of the rate for Aaa-rated corporate bonds (0.56%), and, again by Moody's, a Aaa-rated corporate security, like that of a bond insurer, has more than ten-times the default risk of a single-A muni.

After Moody's published their default study in 2002, the agency began selectively assigning corporate scale ratings, called "global scale ratings" by them, to muni issuers selling taxable debt specifically to investor segments (e.g. foreign banks, etc.) with little traditional understanding of US municipal ratings. These corporate scale ratings underscored—while, in our opinion, still understating—the relative default protection of municipals. For example, the City of Detroit's taxable COPs are currently rated Baa2 on the municipal scale and Aa2 on the corporate scale. The State of California is rated A1 on the municipal scale, Aaa on the corporate scale. Moody's has also provided a ratings map or matrix that shows the likely global scale equivalent for any given muni rating (**Fig. 3, page 1**); note how the sector to which a bond belongs is highly important—consistent with the Fitch study of how historical muni defaults cluster tightly by sector (**Fig. 2, page 1**). MMA, along with many other muni market participants, uses the Moody's map to better understand muni risk in its broader market context.

A technical distinction here is that, while muni ratings are one dimensional, depicting default risk only[1], corporate scale rat-

[1]Actually, S&P defines muni ratings as predicting default while for Moody's they show proximity to distress (meaning, the point at which the obligor would need to access extraordinary means or capital to keep payments current). The muni market has largely disregarded these differences, as, it appears, have the rating agencies, which still rate many securities the same regardless of their scales' differing perspectives. In theory at least, Moody's muni ratings should be several notches lower than those of S&P as distress is typically closer than default.

BOND INSURANCE AND CONCLUSION

ings are two dimensional, incorporating both probability of default (PD) and projected default-related losses. Moody's matrix applies this two dimensional framework to munis; using their example, a local GO A3 rating has a PD of 0.66% and a loss given default rate of 10%. Multiplying those together gives a 10-year expected loss of 0.066%, equivalent to the loss history of Aa1-rated corporate bonds. Within this matrix, a B1 municipal airport rating maps to a corporate scale Baa2, while an A3 rating on a not-for-profit hospital equates to a Moody's corporate A1.

THE BOND INSURERS: Regarding munis, the insurers largely avoid the four sectors that have accounted for 86% of all historical muni defaults. Thus, based on statistics, the insurers themselves are substantially more likely to default than the vast majority of the muni credits they protect, even as US muni issuers pay the insurers to "guaranty" up to 50% of all new issuance. In effect, the bond insurers—which have been able to maintain very limited collateral rates (1-1.5 cents per dollar of net exposure)—engage in rating scale arbitrage, translating high quality muni credits onto the corporate scale. In MMA's opinion, if the insurers' muni risks were not already eligible for AA or better corporate scale ratings, there is little chance the insurers would themselves be able to garner corporate AAA financial guaranty ratings under their current business model.

CONCLUSION: Noting the tremendous potential benefits to taxpayers and the growing incentives for investors and dealers, we see greater rating scale integration as inevitable. Faltering market confidence in the bond insurers has created an opportunity for interested parties to press this issue, both locally and at the federal levels. A federal or even state policy choice could be to restrict the use of tax exempt bond proceeds to ratings that are comparable with other US taxable market obligations like Treasuries and corporate bonds. There is also a fledgling movement among the alternative investors to encourage rating agency action, perhaps by allowing the synthetic floating rate securities issued by a TOB (i.e., the TOB's trust equity) to be rated on the global scale, regardless of how the underlying muni bond is rated. This would cut the relevancy of bond insurance in the primary market, lead to lower insured penetration, and increase the industry-wide interest in corporate equivalent ratings. However, the traditional investment community should be expected to continue to discourage any change, and issuers do not have the full support of their financial representatives. With at least $2B of annual taxpayer savings possible, we urge issuers to act.